on the Arrangements made by the Urban District Council of Sevenoaks for the Isolation of Infectious Diseases.

General Collection

R. THORNE THORNE,
Medical Officer,
March 7th, 1896.

193

On January 13th, 1896, the Board received a letter from the hon. secretary of the Kent Nursing Institute, intimating that one of their nurses had died from typhoid fever on December 29th, 1895, at the Sevenoaks Urban Isolation Hospital, where she had been employed in nursing scarlatina cases. This letter contained a request that the Board should hold an inquiry into the circumstances attending the nurse's death, which the Committee of the Nursing Institute attributed to the "insanitary condition of the hospital, to "discomforts, and to improper work," thrown upon the deceased by the "mismanagement" of the hospital. While this letter was being considered the Board received, on January 17th, a second communication, this time from the lady President of the Nursing Institute, urging that an official investigation of the facts relative to the nurse's death should be made, and forwarding a statement from the Committee in support of the allegations contained in the hon. secretary's letter of January 13th. A copy of the Committee's statement was forwarded to the Sevenoaks Urban District Council with a request that the Board should be furnished with a report by the Council's officers as to the facts connected with the death of the abovementioned nurse from fever in the hospital. On January 29th the clerk to the Urban District Council forwarded to the Board three reports, viz., (1) from the Sanitary Inspector, (2) from the recently appointed Medical Officer of Health, and (3) from the Sanitary Committee of the Urban Council. All these three reports disclaim responsibility for the alleged "mismanagement" of the hospital, and the Board were left to infer that no arrangements for the proper or sufficient supervision of the hospital and its administration had been made by the Urban Council. Under these circumstances it was thought advisable to have the hospital inspected, and the facts as to the death of the nurse investigated by one of the Board's Medical Staff. The duty was allotted to me and I visited Sevenoaks on February 6th.

## 1. The Sevenoaks Urban Isolation Hospital.

This hospital (locally known and marked upon the Ordnance map as "The pest-house") is a two-storeyed dwelling, and comprises eight rooms, a kitchen, a wash-house or scullery, a bathroom, and a pantry, along with some outbuildings. It is situated on the confines of the Urban District in Oak Lane about a mile from Sevenoaks, and was formerly a private house. site is under half an acre in extent and is bounded on three sides by land, and on the fourth by Oak Lane from which access to it is obtained. The site is enclosed merely by a low hedge. Part of the house and some of the outbuildings abut upon one of the fields bounding the site. There are, practically, no inhabited houses near the hospital; the nearest dwelling is about 250 yards off, and the next is about 400 yards away. The subsoil is gravel and sand. The ownership of this "hospital" is vested in the Overseers of the Poor for the old parish of Sevenoaks which includes, besides the Urban District, two small portions of the Sevenoaks Rural District, viz., the hamlets of Sevenoaks Weald and Riverhead, which have the privilege of sending their infectious cases to the hospital. The Urban Council pay to the overseers a yearly nominal rent of 5l. Water supply is from the Sevenoaks Water Company's service, and is "laid on" to the hospital. The urban sewers are

E 91094, 250.-3/96, Wt. 25075, F. & S. A.



400 yards distant from the isolation hospital, which is not connected with the system of sewerage, but drains its slop water to a cesspool ten yards from the building. This cesspool is said to be water-tight, and the sewage is pumped up and removed periodically. Excrement disposal is by means of one earth closet for the whole establishment; the closet is situated close to the side door just outside the hospital itself. The outbuildings include an ambulance shed in which is kept an ambulance—a converted cab—a wood and coal shed, and a fowl house. There is no mortuary nor disinfecting chamber. laundry work is done inside the house in a scullery, and there is no separate means for washing the linen of the nurses. The "hospital" itself comprises, four apartments on the ground floor, four on the first floor, and two on the Those on the ground floor are the kitchen, the scullery or washhouse, and two rooms one of which is used as a sitting room for the nurses, the other is said to be available, if necessary, as a ward for one case, but it is seldom or never used for that purpose. On the first floor are two rooms used as wards, one with one bed, the other with two; between these two wards is a bathroom with a movable bath on wheels. At the back are two apartments, one with two beds used as a nurses' sleeping room, and the other as the caretaker's bedroom. At the top of the house are two wards, with partially sloping ceilings, in each are two beds. The following table gives the measurements of the above-named apartments on each floor.

Ground Floor.—Four apartments (and a small pantry):—									
1. Nurses' sitting room (at the front) -	8470	12' .		$^{\prime\prime}\times7^{\prime}4^{\prime\prime}$					
2. Occasional ward, for one bed (at the front)	-	13'	$\times$ 8'	$\times 7' 4''$					
3. The kitchen (at the back) -	-	12'	$\times$ 9'6	$^{\prime\prime}\times7^{\prime}$ 6 $^{\prime\prime}$					
This is the living room of the caretak	er,								
and all the cooking of the establishme									
is done here.									
4. Wash-house and scullery (at the back)	-	12'	$\times$ 8'	$\times 7'$					
First Floor.—Four rooms and bathroom:—									
1. Front ward, No. 1, one bed			• •	$\times 7' 9''$					
2. ,, No. 2, two beds				$6'' \times 7' 6''$					
3. Bathroom at front, between two wards				$\times 7' 6''$					
4. Caretaker's bedroom, at back -				$5'' \times 7' 9''$					
5. Nurses' bedroom (two beds)	-	13′ 6	$5'' \times 10'$	$\times 7' 6''$					
Second Floor.—Two wards:—									
1. First ward (with two beds)	-	13'	$\times 17'$	$\times 7'$					
2. Second ward (with two beds)	-	10'	$\times 17'$	$\times 7'$					

The hospital has, nominally, seven beds for sick cases, viz., four on the top storey and three on the first floor. Under circumstances of great pressure, as has been stated, a bed could be put up in the room on the ground floor for another case. The seven beds in the four ward-rooms have among them a total cubic space amounting to about 4,600 feet, or less than 700 cubic feet per bed. The walls of the hospital are distempered, and this is stated to be renewed on each occasion the hospital is free of patients. Clothing, bedding, &c. is disinfected by means of fumigation by burning sulphur in one of the empty wards. Ventilation of the wards is by means of windows, doors, and fireplaces, no other special provision being made. None of the corners of the woodwork or projections have been rounded off. The walls and foundations appeared free from dampness at the time of my visit. The slop water from the scullery sink-pipe delivers in the open over an earthenware trapped gully, and passes thence to the cesspool. bath waste-pipe discharges also over a similar trapped gully, and the contents are conveyed thence by pipes to the cesspool. Rain water from the roof passes by the downfall pipes to an underground cistern, and is used for washing purposes.

The permanent residents at the hospital are a man and his wife, the latter acting as caretaker and as cook when there are patients in the building; the former acts as porter, and gives general help as required. receives 8s. per week and 1s. extra per head per week for each case under isolation in the hospital. The man gets 15s. per week. Nurses have been



engaged from the Kent Nursing Institute, West Malling, as required, at the discretion of the sanitary inspector (Mr. Fowler), who has hitherto exercised a general supervision over the hospital arrangements. The Urban Council have appointed no medical superintendent. Each patient is treated by his or her own medical attendant. The Urban Council has no hospital committee, but the Sanitary Committee, consisting of the whole (12) members of the Council, deliberate, when it is thought necessary, upon hospital matters that are brought to their notice. The present Medical Officer of Health (for the West Kent combined District), who has only held office since October 1895, resides at Tonbridge, some 9 or 10 miles from Sevenoaks; he has received no instructions to superintend the administration of this isolation hospital.

No admission book is kept at the hospital, but the sanitary inspector keeps at his office a record of the cases admitted. I am indebted to him for the following Table, which gives the number of cases treated in the Sevenoaks

Urban Isolation Hospital in each of the last six years:—

Diseases.	1890.	1891.	1892.	1893.	1894.	1895.	Total in Six Years.
Scarlatina	_	1	6	11	22	9	49
Diphtheria	1	_				1	2
Enteric Fever	_	_	_	_		3*	3
	1	1	6	11	22	13	* 54†

<sup>\*</sup> Two of these came from the rural part of Sevenoaks parish. † Four, out of the 54, came from the rural part of the parish.

When there is much work to be done at the hospital, one or more charwomen are engaged to do the washing and cleaning. The building has been

used as a hospital since 1874.

During the five years, ending December 31st, 1895, the sum of 707l. has been expended by the Sevenoaks Urban Council upon the hospital, exclusive of the yearly nominal rent. For the furnishing of the hospital the expenditure for these five years amounted to 72l. 9s. 10d. But during the present year, i.e., January 1st to February 3rd, 1896, a sum of 189l. 8s. 1d. has been expended on the institution, and the cost of furnishing, during the same period, amounted to 33l. 4s. 11d. The present population of the town of Sevenoaks is estimated at 8,000, and the rateable value at nearly 50,000l.

On December 31st Dr. Tew, the Medical Officer of Health, reported to the Council upon the hospital, and made certain suggestions for its improvement. In concluding his report, Dr. Tew suggested the advisability of extending the site, and erecting upon it a hospital of a more satisfactory sort, in preference to expending money in attempts to improve the present one. The Urban Council, I learn, are at present considering the advisability of enlarging the site, and of erecting thereon a new hospital.

The hospital was empty when I visited it on February 6th, and workmen

were employed at the time in distempering the walls, &c.

## 2. The Circumstances attending the recent Death of a Nurse from Enteric Fever at the Hospital.

Previous to October 20th, 1895, the hospital had been empty for some time, but on that date a girl was removed there from Sevenoaks Weald, suffering from enteric fever; and on October 22nd a brother of the first case was also admitted, suffering from the same disease. On October 24th the girl died, but her brother made a good recovery, and was discharged "cured" on November 19th. On November 6th a lad was admitted to the hospital suffering from scarlatina, and on the same day Nurse Maddox, from the Kent Nursing Institute at West Malling, came to nurse him. During the rest of November two more scarlatina cases were admitted, and in December three others. These scarlatina cases were treated in the two wards on the top

storey, the enteric case being in one of the rooms on the first floor up to his discharge on November 19th. On December 17th Nurse Maddox complained of illness, and her case was shortly after recognised as enteric fever. died of the disease on December 29th. During the time she was ill there were four other nurses in the hospital, two nursing the scarlatina cases and two attending to Nurse Maddox herself. Shortly before the latter died, her sister and a lady friend came to the hospital, and remained there several nights, to be with the dying nurse. The accommodation in the hospital only affects to provide for nine persons, but at the end of December there were 13 residing there, not including the two caretakers, who left the hospital on December 20th, under circumstances about to be mentioned. It is asserted that during November and December the then caretakers neglected their duties; that they behaved rudely and insolently to the nurses, and allowed the kitchen to become dirty. It is also stated that on several occasions these two caretakers (husband and wife) came back from Sevenoaks in a drunken condition, and were violent and abusive. The nurses thus found it impossible to hold communication with them, and began, some time in the first fortnight in December (the exact date I could not ascertain) to cook their own food, and that of the patients, in the front sitting room; and, rather than ask assistance from the caretakers, they also did washing and rough work in the hospital. It formed part of the male caretaker's duty to empty the receptacle of the earth closet daily, but this, it is stated, he latterly neglected to do, and the closet became a source of grave nuisance; another duty he had to perform, was to remove the utensil containing the typhoid excreta, handed to him by the nurse, and bury the contents, to which carbolic acid had been added, in the garden. But he merely emptied these discharges out upon the surface of the ground, near the house, and did not even cover them up with soil. This filth lying near the house created The cesspool near the hospital (only ten yards away) had formerly been emptied by him when necessary, but it became too full in December, and, I am informed, that the contents overflowed on to the surface of the ground. The cesspool was properly emptied by a contractor on January 6th, 1896, but it is said that during December its condition gave rise to complaints. The male caretaker was kept supplied with carbolic powder, chloride of lime, and quick lime, for use in the receptacle of the earth closet, and for sprinkling on the ground, &c., when the cesspool was emptied. But during December, if not earlier, he seems to have made little, if any, use of these substances. The existence around the hospital of the filth nuisances described, caused offensive smells to pervade the whole building during December, and obviously involved considerable risk of injury to health. The nurses during this period suffered from sore throat, vomiting, and purging. Added to these troubles and discomforts, the chimneys smoked, the bedding was insufficient, and the necessary articles of glass and crockery were too few. The grievances of the nursing staff at last became so insupportable, that complaint was made to the Chairman of the Sevenoaks Urban Sanitary Committee, who is a medical practitioner and who was then attending at the hospital on two of his own cases suffering from He at once brought the complaints of the nurses before the Committee and that body on December 18th called upon the two offending caretakers to resign. This resignation took place on December 20th and the caretakers then left the hospital receiving a month's wages in lieu of notice. Two new caretakers, husband and wife, were engaged and began their duties on December 21st, but they did not sleep at the hospital owing to its then overcrowded condition. They took up residence there at the beginning of the present year. Nurse Maddox, it is stated, never assisted in nursing the enteric fever case which was in the hospital during November.

The above statement of the events that preceded the death of Nurse Maddox shows—

1. That the Sevenoaks Urban Hospital which has no means for the isolation at one and the same time of two different infectious fevers was improperly used for that purpose last November.

2. That its sanitary condition in December was calculated to favour the

spread of filth diseases, such as enteric fever and diarrheea.

3. That its administration was both lax and inefficient, and that under the sudden pressure of the admission of a number of cases it broke down.

4. That the hospital itself was inadequately equipped.

The remedy for these shortcomings, as the Medical Officer of Health has pointed out, is the provision of a suitable hospital and the appointment of a medical man as superintendent who shall be responsible for its administration. If the existing site could be sufficiently extended the present building might be retained for administrative purposes and afford sleeping accommodation for nurses.

R. BRUCE LOW.

February 13, 1896.